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Whitney, Travis H.

Report to the public service commission for...

[New York]

[1916]

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NOV 2 4 1916

Report to the Public Service Commission

FOR THE FIRST DISTRICT

ON

DUAL SUBWAY SYSTEM

ESTIMATED ADDITIONAL COST
AS OF MAY 1, 1916

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by
TRAVIS H. WHITNEY
Commissioner

LE ROY T. HARKNESS
Chief of Rapid Transit

July 6, 1916

July 6th, 1916.

To the Public Service Commission
for the First District

In response to the Commission's directions we have for some time past been engaged in an analysis of the estimated cost of the Dual Subway System with the end particularly in view of determining so far as is possible at this time the additional amounts that will have to be provided by The City of New York to carry this work through to completion. In order that this report may be read without reference to various documents it has been thought convenient to add as Appendix A a brief statement of the City's rapid transit agreements and of the underlying financial bases of the dual contracts.

As a result of this analysis the following results are indicated, subject to the reservations noted in the body of this report. It should be borne in mind, however, that this is purely a construction estimate and does not take into account deficits from operation. Nor does it take into consideration the Commission's expenditures for administration, superintendence, legal expenses and the like which, according to the understanding reached with the Board of Estimate and Apportionment at the time the dual contracts were approved, were to be taken care of through the budget subject to possible future refundings.

CONTRACT NO. 3.

	Cost as indicated by appropriation of March 18, 1913	Cost as indicated by estimates as of May 1, 1916	Estimated additional cost
Construction	$103,808,964.75	$102,500,000.00 (a)	$1,308,964.75 (balance)
Interest	7,636,673.09	13,762,015.00 (b)	6,125,341.91 (deficit)
Real Estate (including yards and terminals constructed)	7,767,250.39 (c)	7,250,057.30 (d)	517,193.09 (balance)
Company debt discount and expense and administration	2,390,000.00	2,390,000.00 (e)	
Totals	$121,602,888.23 (f)	$125,902,072.30	$4,299,184.07

CONTRACT NO. 4

	Cost as indicated by appropriation of March 18, 1913	Cost as indicated by estimates as of May 1, 1916	Estimated additional cost
Construction	$98,701,960.83	$107,000,000.00 (a)	$8,298,039.17
Interest	8,895,030.17	13,004,039.00	4,109,008.83
Real Estate (including yards and terminals constructed)	6,000,000.00	11,128,155.63 (d)	5,128.155.63
Company debt discount and expense	405,000.00	405,000.00 (e)	
Totals	$114,001,991.00 (f)	131,537,194.63	17,535,203.63

Total estimated additional cost, Contracts Nos. 3 and 4 ..... $21,834,387.70

(a) Total of new construction estimates. See appendices B^1 and B^2

(b) Upon basis of company interest cost of $7,600,000; Interborough claims $9,000,000. See Appendix C.

(c) Includes unrescinded real estate appropriations prior to March 18, 1913; Contract No. 3, $267,250.39.

(d) Net figure after deducting present and prospective salvages on real estate. Present salvages that have been credited to rapid transit fund (suspense account); Contract No. 3, $23,965.34, Contract No. 4, $853,347.24. Does not include light, air and access damages. See Appendix D.

(e) Interborough Company and N. Y. Mun. Ry. Corp. claim increased allowance for administration, etc. which are in dispute. It is therefore impracticable at this time to attempt to give in this report any precise forecast of these amounts.

(f) These figures together are in reality $2,000,000 less than the Chief Engineer's estimates. Also they do not include premiums realized on the sale of bonds. See *p. 3 post*. The Finance Department figure of $40,501,991 as indicating obligations incurred prior to March 18, 1913 is used. The Commission's figures indicate a larger amount to wit: $13,530,395.26 (Loop Line appropriations) ($20,156,268.95 (Fourth Avenue appropriations) $7,768,276.50 (Broadway appropriations) plus bond premiums credited to this account $310,504.25 totalling $41,765,444.96 less $1,074,254.52 (appropriations rescinded) =$40,691,190.44 or an amount $188,199.44 in excess of the Finance Department figure.

Practically all of these amounts, except those for interest, debt discount and expense and administration, have been disbursed on Commission vouchers. In the case of real estate the vouchers are based on contracts entered into by the Commission or upon condemnation proceedings instituted by the Commission and prosecuted by the Corporation Counsel. In the case of construction proper the vouchers are based upon contracts let after competitive bidding. At the end of each quarter year the Chief Engineer renders a determination of the cost paid or accrued during such quarter. If objected to it is subject to redetermination by the Chief Engineer and afterwards to review by arbitration.

General Statement as to the Appropriations

At the time of the dual subway negotiations that ran through the years 1911 and 1912 and culminated in the signing of the documents dated March 19, 1913, detailed plans for the greater part of the lines had not been prepared and in some cases the routes themselves were as yet undetermined. The estimates, therefore, were necessarily general, being comparable with preliminary estimates usual on railroad work where an approximate general estimate was necessary upon which to predicate the financing of the work.

On March 18, 1913 the Board of Estimate and Apportionment upon requisition of the Commission appropriated the balance of the amounts then deemed sufficient to carry out the City's obligations under Contracts Nos. 3 and 4. These appropriations in respect of the time of their being made and of the division between the City and the companies were made up as follows:

	Contract No. 3	*Contract No. 4*
Appropriated prior to March 18, 1913	$35,402,888.23	$40,501,991.00
Company contribution	58,000,000.00	13.500,000.00
Appropriated on March 18, 1913	28,200,000.00	60,000,000.00
Total	$121,602,888.23	$114,001,991.00

The gross appropriation in the case of each contract was made up of the elements of construction, interest, real estate and debt discount and expense as indicated in the first tables *supra*. The appropriations however were in bulk sums and the apportionment as between the various elements was not made a matter of record, but is taken from memoranda made at the time. It should be noted that the funds necessary to meet the Commission's expenses are not included in the above figures. As was understood at the time those expenses were to be met outside of the construction appropriations proper.

It should be borne in mind, however, that the Chief Engineer's estimates called for a total $2,000,000 in excess of that actually appropriated. Shortly before the appropriations of March 18, 1913 were made the Chief Engineer, during a conference with the Chairman of the Commission and the Chairman of the Transit Committee of the Board of Estimate and Apportionment, in answer to a suggestion of such a reduction, stated that $2,000,000 might be de-

ducted from the estimates but that he "would probably have to call for it in the end". The gross estimates for both contracts should therefore be $2,000,000 in excess of the gross appropriations. For purposes of comparison, however, the actual appropriations made by the Board of Estimate and Apportionment are used.

In another respect the dual subway appropriations are reduced below what would otherwise be the case. Under the previous rapid transit contracts the appropriations carried with them the premiums on the sale of bonds and logically if the rapid transit account is charged with interest on the bonds it should be credited with the premiums on the sale of those bonds, since the premiums together with the face amount of the bonds indicate the actual realization of funds upon the basis of the interest rate fixed. In the case of the dual subway appropriations, except the appropriations for the Brooklyn and Manhattan Loop Lines and the Fourth Avenue Subway, the Board of Estimate and Apportionment, however expressly provided that the amount was exclusive of the premiums which went to the general fund for the reduction of taxation. The City, of course, gets the benefit of the premiums but the general account is advantaged at the expense of the rapid transit account. We have no means of precisely estimating the amount of premiums realized on the sale of bonds for the construction of the dual system, but on Contract No. 1 upon an aggregate expenditure of about $50,000,000 the premiums amounted to a few thousand dollars less than $2,000,000. The premiums have doubtless been less on later bond issues but the amount of bonds issued or to be issued by the City for the dual system work is several times greater than under Contract No. 1. It is probable, therefore, that if the rapid transit account had the credit of the premiums on its bond issues as had theretofore been the case, there would be several million dollars available for absorbing interest deficits.

The following observations with regard to the original appropriations generally are pertinent:

As has been stated, when the dual contracts were adopted detailed plans for the greater part of the new system had not been prepared and in a number of instances the routes to be followed had not been definitely determined. An exact estimate was therefore impossible. Naturally there could not then be taken into consideration the possibility of the great war and the consequent effect upon the cost of labor and materials in this country.

With regard to interest, there is no data available showing precisely how that estimate was arrived at. It is probable that it was based in large part on the assumption that work running over four years would cost for interest the gross interest for that number of years divided by two ($5 \times 4 \div 2 = 10$). This, however, did not take certain special factors into consideration:

1. A considerable part of the system was already under construction and some of it completed. Thus the Centre Street Loop was put under contract in 1907 and was completed when the dual contracts were let. The same is substantially true of the sections of the Fourth Avenue Subway to Forty-third Street that were let in 1909. Contracts for a number of sections of the Lexington Avenue route were let in the summer of 1911 and work under them was well advanced.

2. The dual contracts were delivered on March 19, 1913 and the date for initial operation was fixed therein at January 1, 1917—a period of less than four years. The present subway with an original cost of around $40,000,000 took four years and eight months before any part of it was thrown into operation and that work was minor and simple in comparison with the new undertaking. Furthermore, the detailed plans had not been prepared for by far the greater part of the new system and they, together with specifications and forms of contracts, had to be prepared and advertised before work in the field could be started. Despite all this the new system is being constructed more rapidly than the old.

3. The extra cost of interest involved in the company's holding large amounts ready in anticipation of requirements. Although this has swelled the interest cost it should be remembered that partly because of it the company's financial arrangements were so strong that they were practically unaffected by the shock of the war.

Again, with regard to real estate, there is no data available as to the bases for the estimates. It is understood that, because the absence of a definite and studied layout of the new lines made an exact estimate impossible, the estimate was made by first computing the rate per linear foot of track that real estate cost in the cases of Contracts Nos. 1 and 2 and then applying that result to the linear foot of trackage of Contracts Nos. 3 and 4. That manifestly did not take into consideration the fact that for various reasons there could be no fair comparison between the real estate requirements

under Contracts Nos. 1 and 2 and under Contracts Nos. 3 and 4. As a general proposition because of its straightway operation little real estate was required in case of Contracts Nos. 1 and 2 while the curves and connections required by the layout under Contracts Nos. 3 and 4 required a great deal of real estate. Furthermore as a rule real estate valuations in 1913-16 were higher than the valuations of the same properties would have been in 1900-1906.

With Respect to the Several Elements of Cost
CONTRACT No. 3

Construction

There remained to be provided for on May 1, 1916 the following items of construction:

Route No. 31 (Livonia Avenue Line).
Route No. 35 (Steinway Tunnel Extension to Times Square).
Route No. 27 (149th Street Connection).
Station Finish Contracts for approximately 73 stations.
Track Installation contracts for about 68 miles of single track and minor construction items.

The estimate for completing this work is $10,271,332. As indicated on Appendix B[1] it is now estimated that there will be a balance on the construction account proper of $1,308,694.75.

It might be noted that the Steinway Tunnel Extension to Times Square cannot be begun until the Seventh Avenue Line south of 42nd Street and the Lexington Avenue Line are in operation.

Interest

As it has been noted above there is a difference between the accountants of the Commission and the Finance Department and of the Interborough Company regarding the necessary reservation for interest on company money. The Commission's estimate is $7,600,000 while the Interborough Company insists that a reservation of $9,000,000 is necessary.

The amount to be reserved is dependent upon the time when the new railroads go into operation. If they go into operation before the dates estimated, the interest cost will be reduced; if they go into operation afterward the interest cost would be increased. It is expected, however, that the mean will be about as indicated in the Commission's computation.

Real Estate

The real estate remaining to be provided consists chiefly of that for terminal yards and shops. The original estimates included the cost of constructing yards and shops under real estate and that course has been followed in the present estimates. The cost of the real estate remaining to be acquired (including the construction cost of yards and terminals) and the cost of real estate acquired but not paid for, is estimated at $8,414,926.43. This will leave a balance on the real estate account of $517,193.09.

There has been deducted the estimated salvage on resale. An endeavor has been made to approximate such amount as nearly as possible. It is, however, necessary to make the reservation in connection with such estimate that the amount to be realized upon a resale of the property is very largely dependent upon market conditions. It must be emphasized both with respect of Contract No. 3 and Contract No. 4 that the real estate factor is very uncertain, not only with regard to salvage but also with regard to probable purchase prices and to awards in condemnation proceedings.

The original estimates for real estate were inclusive of light, air and access damages for the elevated portions of the city railroads. As the amount of these damages can only definitely be ascertained after the filing of awards in condemnation proceedings, it is impractical to attempt to make any estimate at this time. In the case of Contract No. 1 some of the easements of light, air and access were extinguished at the rate of one dollar per lot, while in other cases the rate ran as high as $10 per front foot.

Debt Discount and Expense and Administration

In the above table no change is indicated in this allowance. As originally made it included an item of about $600,000 for the Interborough Company's expenses for administration, superintendence, engineering and legal expenses and the like. The company has presented revised estimates in excess of this amount.

These estimates are based upon portions of the time of certain officials and employees of the company to the construction work. This basis has been rejected by the Commission which has taken the position that the Interborough Company should only be compensated for the actual increases in cost due to its necessary activities in connection with the construction work.

CONTRACT NO. 4

Construction

There remained to be provided on May 1, 1916 the following items of construction:

Sections Nos. 1, 2, 4, 5 and 6 of Route No. 8 (14th Street-Eastern Line).

Sections Nos. 1 and 2 of Route No. 45 (Nassau Street).

Sections No. 1-B of Route No. 12 (Under the Flatbush Avenue Station of the Long Island Railroad).

Station finish contracts for approximately 43 stations.

Track installation contracts for about 61 miles of single track and minor construction items.

The estimated cost of this work is $20,346,402. As indicated on Appendix B[2] it is now estimated that there will be a deficit in the construction account proper of $8,298,039.17.

An examination of details on Appendix B[2] will indicate that about half of this increase occurs in the construction of the 14th Street-Eastern Line; the new estimate calling for an amount $4,255,833 in excess of that carried by the appropriation. This reflects the increases in the prices of labor and materials caused by the war. The cost of labor seems to be steadily increasing. The price of steel has probably shown the greatest single increase. During a considerable part of the work the price for steel erected was $50 a ton. Lately it has increased to about $80 per ton. It is accurate to say that there is not an item of materials used in subway work that has not substantially increased in price within the past two years.

Interest

The interest is based upon the reservation by New York Municipal of $2,430,000 as interest on company money. This amount

seems excessive but even though eventually reduced will not substantially affect the results.

In connection with what has been stated above with regard to the construction of the 60th Street tunnel attention is called to the fact that it will also be necessary to finance the interest during construction on that work.

Real Estate

The real estate situation under Contract No. 4 is aggravated by the fact that it will probably be more difficult to obtain proper salvages on resale in this case than in the case of Contract No. 3. By utilizing the existing terminal and storage facilities it is not necessary now to expend substantial sums for these purposes.

What has been stated under "Contract No. 3—Real Estate" with respect of light, air and access damages applies as well to Contract No. 4.

Debt Discount and Expense

New York Municipal Railway Corporation has also presented claims for administration in excess of that originally contemplated.

In conclusion it might be noted that the net increase in the cost of construction proper for both contracts, using the appropriations as a basis, is practically $7,000,000 on an estimate of over $202,000,000, and represents an excess slightly less than three and one-half per cent. If the Chief Engineer's original estimate, without the deduction of $2,000,000, be taken as a basis the increase would be practically $5,000,000 on an estimate of over $204,000,000 and represents an excess of less than three per cent. All of this deficit and more can reasonably be charged to increases in the costs of labor and materials on account of war conditions. In other words, except for war conditions the construction cost would probably have been within the original estimates. Even without considering the effect of the war upon prices of materials this is a remarkably close approximation for a general preliminary estimate made without detailed plans and with a number of routes undetermined.

We submit herewith requisitions upon the Board of Estimate and Apportionment for additional amounts necessary as indicated

above. In these requisitions the precise figures given above are rounded out and the requisitions call for $4,350,000 for Contract No. 3 and $17,600,000 for Contract No. 4, as against the precise figures respectively of $4,299,184.07 and $17,535,203.63. We also submit a proposed form of communication to the Board of Estimate and Apportionment in which, among other things, is set forth a statement of the amounts that will be necessary for the balance of the year 1916.

Attention is called to the fact that the new Contract No. 4 requisition does not include the cost of constructing the 60th Street tunnel which upon the initiation of the Board of Estimate and Apportionment was provided for as a modification of the original plan which involved a crossing over the Queensboro Bridge. The City has a written guarantee from The Degnon Contracting Company that this tunnel will not cost in excess of $4,500,000. As this work was not included in the original appropriation it is not now included in the revised estimates. But a requisition will be made for such amount when the award upon the contract is made which will probably be within the next month. Although excluded from the present estimate so as not to disturb the comparison with the original appropriation it will of course be necessary to finance this in the same way after the indicated deficits are taken care of. There will also be involved the cost of real estate for the tunnels which, however, should not be large. Also interest during their construction.

As stated above this report does not take into consideration the matter of deficits from operation. A considerable part of the dual system is already in operation and more and more will be placed in operation within the next few years. As the City is dependent upon the receipts from operation for its interest and sinking fund requirements it necessarily follows that any failure of the operation to meet those charges must be borne by the City subject to repayment out of future earnings. We shall in a future report take up in detail the matter of deficits from operation and endeavor to indicate what the amounts of these deficits will be during the next few years.

TRAVIS H. WHITNEY
Commissioner

LE ROY T. HARKNESS
Chief of Rapid Transit

APPENDIX "A"

The City of New York, through the former Rapid Transit Board, let two contracts for construction, equipment and operation under the municipal construction provisions of the Rapid Transit Act:

1. Contract No. 1 of February 21, 1900 with John B. McDonald for the part of the present subway north of the Post Office, and
2. Contract No. 2 of July 21, 1902 with Rapid Transit Subway Construction Company for the portion of the present subway between the Post Office in Manhattan and the Flatbush Avenue station of The Long Island Railroad Company in Brooklyn.

Both of these contracts were subsequently assigned to Interborough Rapid Transit Company. Under them the City has up to the present time invested over fifty-six million dollars in construction. By the terms of these contracts the Interborough Company pays as rental for the use of such City property an amount, generally stated, equal to interest and sinking fund requirements on the amount of corporate stock issued by the City for construction. This payment is the first one made out of the revenues of the railroad and is not dependent in any way upon the Company's receipts from operation. This rental is slightly increased by the dual contracts and continues as a primary charge throughout the lease.

On March 19, 1913, the Commission, acting on behalf of the City, entered into the so-called Dual System contracts which involved more than doubling the existing rapid transit facilities, subway and elevated, at a combined city and company expense of over three hundred and thirty million dollars according to the then estimates. These agreements were entered into between the City and Interborough Rapid Transit Company and Manhattan Railway Company on the one hand and New York Municipal Railway Corporation (a corporation formed in the interest of Brooklyn Rapid Transit Company) on the other hand and comprised the following documents:

1. Contract (No. 3) with Interborough Rapid Transit Company covering new municipal lines.

2. Certificate to Interborough Rapid Transit Company for elevated railroad extensions to existing Manhattan El. system.

3. Certificate to Manhattan Railway Company for additional tracks on existing El. system.

4. Contract (No. 4) with New York Municipal Railway Corporation covering new municipal lines.

5. Certificate to New York Municipal Railway Corporation for elevated railroad extensions to existing Brooklyn El. system.

6. Certificate to New York Municipal Railway Corporation for additional tracks on existing Brooklyn El. system.

7. Supplementary agreement providing trackage rights over Contract No. 3 subway lines for Manhattan El. trains.

8. Supplementary agreement providing New York Municipal Railway Corporation with trackage rights over Contract No. 3 lines in the Borough of Queens.

CONTRACT NO. 3

The main points in the arrangement with the Interborough Company (Contract No. 3) were:

1. The Company agreed to equip new municipal lines at an estimated expense of $22,000,000, to contribute $58,000,000 toward the construction, and when constructed and equipped to maintain and operate such new lines for a term of forty-nine years in conjunction with the existing subway systems for a single five-cent fare.

2. The leases of the existing subways (Contracts Nos. 1 and 2) were leveled so that the subways constructed under those contracts and the new subways will fall into the City's possession at one and the same time.

3. The new lines are subject to recaption at the end of ten years in accordance with the provisions of the Rapid Transit Act. This recaption may be exercised either directly by the City or through a new contractor. Provision was also made for exchanging part of the new subway lines for part of the old so that in the event of recaption the City may take over a complete east side or a complete west side line.

4. The so-called Belmont Tunnel extending under Forty-second Street and the East River to the Borough of Queens was turned in as part of the system at a valuation of $3,000,000.

5. The receipts from existing and new subway lines are to be pooled and from the gross receipts of both lines there is to be deducted and paid in the order named, deficits to be cumulative with compound interest:

(a) Rentals payable to the City under existing subway contracts; operating expenses; provision for depreciation, renewals and obsolescence; taxes and insurance.

(b) A sum to be retained by the company amounting to $6,335,000 per annum representing the average annual income received by it from the operation of the existing subway lines and equipment for the two fiscal years ending June 30, 1911.

(c) A sum to be retained by the company equal to 6% per annum upon the new investment of the Interborough Company in the new lines, estimated at $80,000,000 or $58,000,000 for new construction and $22,000,000 for new equipment.

(d) To be paid to the City the interest and sinking fund charges upon the bonds issued by the City for the construction of new lines and in addition such further sum as will bring the payments to be made to the City up to an amount equal to 8.76% upon its expenditures.

(e) Any amount remaining to be divided equally between the City and the company share and share alike.

6. Future extensions required by the City may be added to the system and will be equipped and operated by the company as part of the entire system under a separate accounting system.

7. The company at its own expense is to third-track and extend the elevated lines leased by it from the Manhattan Railway Company. These third tracks and extensions are subject to recaption at the end of ten years.

CONTRACT NO. 4

The main points in the arrangement with the Brooklyn Company (Contract No. 4), were:

1. The company agreed to equip new municipal lines, to contribute $13,500,000 toward the construction thereof, and

when constructed and equipped to maintain and operate such new lines for a term of forty-nine years in conjunction with the existing elevated railroad system of the New York Consolidated Railroad Company for a single five-cent fare.

2. The company to third-track and extend its existing lines at its own expense.

3. The new City lines and also the third tracks and extensions of the existing lines to be subject to recaption at the end of ten years in accordance with the provisions of the Rapid Transit Act. This recaption may be exercised either directly by the City or through a new contractor.

4. The receipts from the existing system and the new subway lines to be pooled and from the gross receipts of both lines there is to be deducted and paid in the order named, deficits to be cumulative:

(a) Cost of operation which shall include operating expenses, taxes, rentals of leased property used in operation and provision for depreciation and renewals.

(b) A sum to be retained by the Company amounting to $3,500,000 per annum representing the average annual income of the New York Consolidated Railroad Company from the operation of its existing lines.

(c) A sum to be retained by the company equal to six per centum per annum upon the investment of the company in the new lines.

(d) To be paid to the City interest and sinking fund charges upon bonds issued by the City.

(e) Any amount remaining to be divided equally between the City and the company share and share alike.

5. Future extensions required by the City may be added to the new City system and will be equipped and operated by the Company as part of the entire system under a separate accounting system.

The general preliminary estimate for all the dual system work—city and company—was in round figures as follows:

Contract No. 3—Construction (City owned)	$122,000,000.00
Equipment (Company)	22,000,000.00
Manhattan Third-tracking and Elevated Extensions Company)	25,000,000.00
Contract No. 4—Construction (City owned)	114,000,000.00
Equipment (Company)	26,000,000.00
Brooklyn Third-tracking, Extensions and Reconstruction of Existing Railroads (Company)	21,000,000.00
TOTAL	$330,000,000.00

It will be noted that in the case of Contracts Nos. 3 and 4 the City is vitally interested in the control of construction, equipment and operation under these contracts in that not only does it put in the greater part of the moneys to be disbursed for construction but its returns from operation necessary to pay interest and sinking fund charges on City bonds are dependent upon the prior earning of the companies' preferentials and their interest and sinking fund charges on new company money. Because of the Brooklyn "L" System being operated in conjunction with the City lines the same is true of the certificates granted to New York Municipal Railway Corporation for additional tracks and extensions save only that City money is not expended on this work. The amounts expended by the Railroad Corporation thereunder are, however, included in the deductions to be made from pooled revenue in advance of the City receiving any return. The certificates to the Manhattan Railway Company for additional tracks and to Interborough Rapid Transit Company for elevated extensions differ from all the others in that neither is the City money invested in construction nor are interest and sinking fund charges on City bonds affected thereby. Although the earnings of the existing Manhattan "L" system and the new elevated construction are pooled and one-half of the excess of the net earnings goes to the City, the receipts from that source are purely rental, and while it is important that the maximum amount of rental be obtained the City's interest in that operation is not as vital as in the other cases where there is a municipal investment and heavy current interest and sinking fund charges on City bonds are constantly accruing.

APPENDIX B[1]

June 26, 1916
As of May 1, 1916.

CONTRACT NO. 3.

Estimated Costs of Projected City Lines for Operation by I. R. T. Co. (2)

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		Original Approximate Estimated Cost March 18, 1913, including extras			Differences Between Columns 3 and 4		Contracts Registered May 1, 1916			Differences Between Columns 4 and 9		Net Differences Between Columns 4 and 9
Group	*Route*	Original Estimates	Corrected Estimate(1)	Approximate Estimate of Cost As Amended (4) May 1, 1916 (3)	Increase	Decrease	City's Share (5)	Co.'s Share (5)	Total Cols. 7 & 8(4)	Increase	Decrease	
A	UPPER MANHATTAN & BRONX LINES:											
1	Lexington Ave. Route–35th St. & Park Ave. to 135th St.	$26,733,000.	$26,499,000.	$26,945,980.	$446,980.	.....	$29,352,523.	$2,142,016.	$31,494,539.	$4,548,559.	.....	
2	Westchester Ave. Branch–135th St. to Bancroft St.	8,087,000.	8,016,000.	6,024,803.	.....	$1,991,197.	3,033,064.	2,140,501.	5,173,565.	.....	$851,238.	
3a	Jerome Ave. Branch–135th St. to Kingsbridge Rd.(Subway	3,354,000.	3,325,000.	4,412,062.	1,087,062.	.....	3,919,922.	.....	3,919,922.	.....	492,140.	
3b	(Elevated.	2,568,000.	2,545,000.	2,157,211.	.....	387,789.	676,196.	1,336,442.	2,012,638.	.....	144,573.	
4	Westchester Ave. Branch–Bancroft St. to Pelham Bay Park	3,113,000.	3,087,000.	2,778,878.	.....	308,122.	1,882,000.	412,776.	2,294,776.	.....	484,102.	
5	Jerome Ave. Branch–Kingsbridge Rd. to Woodlawn Rd.	1,151,000.	1,141,000.	1,106,864.	.....	34,136.	317,119.	710,626.	1,027,745.	.....	79,119.	
	Total	$45,006,000.	$44,613,000.	$43,425,798.	$1,534,042.	$2,721,244.	$39,180,824.	$6,742,361.	$45,923,185.	$4,548,559.	$2,051,172.	I $2,497,387.
B	UPPER BRONX LINES:											
1	White Plains Rd.–179th St. & Boston Rd. to Becker Ave.	$3,761,000.	$3,729,000.	$2,873,121.	.....	$855,879.	$956,076.	$1,779,240.	$2,735,316.	.....	$137,805.	D $137,805.
C	LOWER MANHATTAN & BROOKLYN EXTENSIONS:											
1	Seventh Ave.–Times Square to Battery	$16,947,000.	$16,799,000.	$16,619,890.	.....	$179,110.	$1,248,241.	$13,840,366.	$15,088,607.	.....	$1,531,283.	
2	Park Place, William & Clark Sts.	12,178,000.	12,072,000.	12,106,637.	$34,637.	.....	3,549,206.	8,059,437.	11,608,643.	.....	497,994.	
3	Flatbush Ave. & East. Pkway–Atlantic Ave. to Buffalo Ave.	8,454,000.	8,380,000.	8,343,269.	.....	36,731.	5,054,965.	2,715,583.	7,770,548.	.....	572,721.	
4	Nostrand Ave. East. Pkway to Flatbush Ave.	3,948,000.	3,914,000.	4,363,857.	449,857.	.....	291,139.	3,577,390.	3,868,529.	.....	495,328.	
5	Livonia Ave. Buffalo Ave. to New Lots Road.	1,427,000.	1,415,000.	1,731,084.	316,084.	.....	98,110.	.....	98,110.	.....	1,632,974.	
	Total	$42,954,000.	$42,580,000.	$43,164,737.	$800,578.	$215,841.	$10,241,661.	$28,192,776.	$38,434,437.	.....	$4,730,300.	D $4,730,300.
D	MANHATTAN & QUEENS LINES:											
1	42nd St. Times Square to Steinway Tunnel	$1,365,000.	$1,355,000.	$1,878,216.	$523,216.	.....	$50,922.	.....	$50,922.	.....	$1,827,294.	
2	Steinway Tunnel Adjustment at Grand Central	1,827,000.	1,812,000.	1,368,681.	.....	$443,319.	773,134.	$364,222.	1,137,356.	.....	231,325.	
3	Steinway Tunnel	3,000,000.	3,000,000.	3,000,000.	.....	.....	.....	3,000,000.	3,000,000.	.....	.....	
4	Steinway Tunnel to Queensboro Bridge Plaza	939,000.	931,000.	1,140,042.	209,042.	.....	277,479.	529,964.	807,443.	.....	332,599.	
5	Astoria Line Crescent St. to Ditmars Avenue	1,790,000.	1,774,000.	1,790,521.	16,521.	.....	1,713,903.	.....	1,713,903.	.....	76,618.	
6	Corona & Woodside Line Crescent to Sycamore Ave.	4,041,000.	4,006,000.	3,858,884.	.....	147,116.	3,732,235.	.....	3,732,235.	.....	126,649.	
	Total	$12,962,000.	$12,878,000.	$13,036,344.	$748,779.	$590,435.	$6,547,673.	$3,894,186.	$10,441,859.	.....	$2,594,485.	D $2,594,485.
	Grand Totals	$104,683,000.	$103,800,000.	$102,500,000.	$3,083,399.	$4,383,399.	$56,926,234.	$40,608,563.	$97,534,797.	$4,548,559.	$9,513,762.	D $4,965,203.
	Add to round out	.....	8,964.75			1,300,000.						
			$103,808,964.75			$1,308,964.75						
	Amount now erroneously under Contract 4 authorization, which the Commission has requisitioned to be transferred to Contract 3						$860,050.	.....	$860,050.	.....	.....	
							$56,066,184.		$96,674,747.			D $5,825,253.

Notes:

(1) Corrected immediately prior to execution of Contract 3 by deducting in the aggregate $883,000. at request of Mr. McAneny.
(2) The above figures do not include real estate, yards and terminals.
(3) Value of extra work foreseen has been added, but contractors' claims not yet allowed have not been added. Prospective rescissions have been deducted.
(4) Where work has been completed in part, the amounts of columns 4 and 9 differ to the extent that actual cost of completed work has varied from the contract liability originally fixed.
I—Increase. (5) The amounts now erroneously under Contract 4 authorization have been appropriately placed in this column.
D—Decrease

Est.Div.22-1/6960
FW–MJC

APPENDIX B[2]

As of May 1, 1916. **CONTRACT NO. 4.**
June 26, 1916

Estimated Costs of Projected City Lines for Operation by N. Y. M. Ry. Corp. (2)

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		Original Estimated Cost March 18, 1913, including extras	Approximate	Approximate Estimate of Cost	Differences Between Columns 3 and 4		Contracts Registered May 1, 1916			Differences Between Columns 4 and 9		Net Differences Between Columns 4 and 9
	Route	Original Estimates	Corrected Estimate(1)	As Amended (6) May 1, 1916 (3)	Increase	Decrease	City's Share (4)	Co.'s Share (5)	Total Cols. 7 & 8(6)	Increase	Decrease	
A–1	Morris St. to 59th St.	$26,667,000.	$26,413,000.	$22,800,254.	.....	$3,612,746.	$22,444,145.	.....	$22,444,145.	.....	$356,109.	
2	59th St., 7th Ave. to Queens Plaza	2,312,000.	2,293,000.	3,680,616.	$1,387,616.	.....	3,475,934.	.....	3,475,934.	.....	204,682.	
3	Morris St. to Willoughby St.	6,436,000.	6,380,000.	10,596,820.	4,216,820.	.....	10,316,030.	.....	10,316,030.	.....	280,790.	
4	Nassau & Broad Sts.	5,451,000.	5,405,000.	5,700,900.	295,900.	.....	34,566.	.....	34,566.	.....	5,666,334.	
5	Canal St. Connection	4,039,000.	4,005,000.	1,921,619.	.....	2,083,381.	1,839,497.	.....	1,839,497.	.....	82,122.	
6	14th St. 6th Ave. to East New York	13,916,000.	13,796,000.	18,051,833.	4,255,833.	.....	6,850,163.	.....	6,850,163.	.....	11,201,670.	
7	Fourth Avenue Extension	3,792,000.	3,760,000.	4,161,133.	401,133.	.....	4,202,102.	.....	4,202,102.	$40,969.	.....	
8	Fulton St. & Ashland Pl. to Eastern Parkway	1,842,000.	1,837,000.	3,132,143.	1,355,143.	.....	1,889,054.	.....	1,889,054.	.....	1,293,089.	
9	Centre Street Loop	9,893,000.	9,806,000.	10,540,004.	734,004.	.....	9,693,166.	$801,500.	10,494,666.	.....	45,338.	
10	Fourth Avenue Brooklyn	15,316,000.	15,181,000.	16,177,843.	996,843.	.....	16,703,298.	13,500.	16,716,798.	538,955.	.....	
	Totals	$89,664,000.	$88,866,000.	$96,813,165.	$13,643,292.	$5,696,127.	$77,447,955.	$815,000.	$78,262,955.	$579,924.	$19,130,134.	$18,550,210.*
B–1	Eastern Parkway to Malbone Street	$1,531,000.	$1,518,000.	$1,414,736.	.....	$103,264.	$1,389,170.	.....	$1,389,170.	.....	$25,566.	
3a	Connection 38th St. 4th–9th Aves.	1,840,000.	1,824,000.	2,874,400.	$1,050,400.	.....	.....	$2,925,000.	2,925,000.	$50,600.	.....	
3b	New Utrecht, 39th to 86th to C. I.	2,942,000.	2,917,000.	2,842,255.	.....	74,745.	2,603,929.	.....	2,603,929.	.....	238,326.	
3d	Culver, 9th Ave. to C. I.	3,531,000.	3,501,000.	3,055,444.	.....	445,556.	1,937,726.	.....	1,937,726.	.....	1,117,718.	
	Totals	9,844,000.	$9,760,000.	$10,186,835.	$1,050,400.	$623,565.	$5,930,825.	$2,925,000.	$8,855,825.	$50,600.	$1,381,610.	$1,331,010.*
	Grand Totals	$99,508,000.	$98,626,000.	$107,000,000.	$14,693,692.	$6,319,692.	$83,378,780.	$3,740,000.	$87,118,780.	$630,524.	$20,511,744.	$19,381,220.*
	Add to round out		75,960.83		$8,374,000.							
	making total as authorized		$98,701,960.83		$8,298,039.17							
Amount which properly belongs in Contract 3 authorization, which the Commission has requisitioned to be transferred							$860,050.		$860,050.			
							$84,238,830.		$87,978,830.			$19,021,170.*

Notes:

(1) Corrected immediately prior to execution of Contract 4, by deducting in the aggregate $882,000. at request of Mr. McAneny.

(2) The above figures do not include real estate, yards and terminals.

(3) Value of extra work foreseen has been added, but contractors' claims not yet allowed have not been added. The 61st street tunnels are not included. Prospective rescissions have been deducted, including partial adjustments already made in the case of the Centre Street Loop.

(4) The original contract for the Centre Street Loop and the Fourth Avenue Subway are entered as of March 18, 1913. The amount erroneously under Contract 4 authorization, properly chargeable under Contract 3, is added at the foot of this column to show the contracts registered as of record.

(5) The Company's share, being for work done at cost, does not appear of record.

(6) Where work has been completed in part, the amounts of columns 4 and 9 differ to the extent that actual cost of completed work has varied from the contract liability originally fixed.

* Decrease

Est.Div.22–1/6960
FW–MJC
WF

APPENDIX "C" — Dual Subway System—Estimates of Interest During Construction

Interest

N. B.—The following estimates of interest are based on the *original* estimates of *cost of construction*, with dates of initial operation (March 1, 1918, for permanent operation and various dates for temporary operation) and rate of monthly disbursement of construction funds assumed in July, 1915. If the estimates of construction cost and assumed dates of initial operation are modified, these estimates would necessarily be subject to modification.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Estimated payments of interest Dual agreement March 18, 1913.	Actual payments of interest to May 1, 1916		Estimated payments of interest from May 1, 1916, to completion of construction		Total interest as of May 1, 1916 Estimate	Increase of actual and estimated interest payments as of May 1, 1916, compared with estimate of March 18, 1913		Total excess of estimate of May 1,1916 over estimate of March 18, 1913
		City's share	Company's share	City's share	Company's share		City's share	Company's share	
Contract No. 3.....	$7,636,673	$3,527,110	$3,327,019	$2,634,905	$4,272,981	$13,762,015	$3,490,073	$2,635,269	$6,125,342
Contract No. 4.....	8,895,030	8,373,969	1,497,096	2,200,070	932,904	13,004,039	2,779,429	1,329,579	4,109,009
	$16,531,703	$11,901,079	$4,824,115	$4,834,975	$5,205,885	$26,766,054	$6,269,502	$3,964,848	$10,234,351

(2) Per statement of Comptroller June 5, 1916. Includes payments of city's interest by the companies, to wit, $202,003.61 by Interborough and $660,472.92 by New York Municipal.

(3) Per company statements to Chief Engineer; subject to reduction for any disallowed items subsequent to June, 1913, for Interborough and March, 1915 for New York Municipal.

(4) and (5) Derived from column 6 minus 2 and 3.

(6) Total interest of Interborough Company estimated at $7,600,000, of New York Municipal, $2,430,000. While the former amount may be exceeded as a result of delayed operation, it is not expected to reach the amount claimed by the company as a necessary reservation of funds ($9,000,000), which amount has been used in some of the estimates heretofore made for the Commission.

Bureau of Statistics and Accounts
June 26, 1916

APPENDIX "D" — Dual Subway System—Estimates of Cost of Real Estate

Real Estate

As of May 1, 1916

	Originally allowed in Dual Contract Appropriations of March 18, 1913	Expenditures to May 1, 1916	Property acquired on May 1, 1916, but then not paid for. (Estimated)	Property to be acquired (Estimated)	Salvage on resale (Estimated)	Net Deficit (Estimated)
				(1)		(2)
Contract No. 3.....	$7,767,250.39	$3,159,096.21	$4,895,926.43	$3,519,000.00	$4,323,965.34	$ 517,193.09
		(3)				
Contract No. 4.....	6,000,000.00	10,747,344.61	2,264,158.26	1,070,000.00	2,953,347.24	5,128,155.63

(1) Includes cost of yard and terminals constructed. (2) Surplus on basis of original allowance of March 18, 1913. (3) Includes $1,000,000. for easements and $150,000. for fee in 38th St. cut.

A. M. S.
6/26/16

MSH 21228

END OF
TITLE